CS-M10B – Object Oriented Programming Using C++

Project Assignment #10

Student Name: .

Student ID Number: .

A publishing company markets both books and audio (mp3) file versions of its works. Create a class *Publication* that stores the title (string with embedded spaces), author name (first and last – as a single string) and price (double). All data members are private. ***The class uses pure virtual accessor and modifier functions for the data members***.

From this class derive two classes: *Book* which adds a page count (int) and *AudioBook*, which adds playing time (two integers: hours and minutes). All data members are private.

Write parameterized constructors for all of the classes, accessors and modifiers for all of the data members.

Write a client program that creates a five element array of pointers to Publication. In a loop, prompt the user for a particular book or audio book and use *new* to create an appropriate object (book or audio book). Store all of the object data and place the pointer to the object to the array.

When the user finished entering the data for all books and audio books, display all the resulting data for all the books and audio books using a single loop and a single statement such as:

*cout << pubArray[i]->getTitle( ) << etc.*

Please submit the following:

* A **single** source code file named *week10.cpp*